



IN2

Climate Change and Migration in the Land of Two Rivers

Iraq - September 2024

Rawan Barzan

Mosul's Old Bridge during a dust storm in the summer of 2023. (IN2)

Executive Summary

Key Findings



Climate Change as a Migration Driver:

Climate change is a primary factor behind the movement of people within and outside Iraq. Environmental degradation, especially in rural areas, has severely disrupted traditional ways of life, forcing many to migrate to urban centres or abroad.



Rural and Urban Impact:

Water scarcity and declining agricultural productivity in rural regions have led to widespread displacement. Cities like Baghdad and Basra are struggling with the resulting influx, causing overcrowding in informal settlements.



Health and Environmental Challenges:

Dust storms, heatwaves, and pollution are exacerbating health problems across Iraq. The fragile healthcare system, especially in climate-affected areas, is under immense strain.



Migration Routes and Risks:

Many Iraqis resort to perilous, irregular migration routes to reach Europe, facing significant dangers. Family dynamics, particularly generational perspectives, strongly influence migration decisions.

Recommendations



Use Local Language and Perspectives:

Ensure all climate change re-search, communications, and policies in Iraq reflect local language and experiences. Collaborate with communities to make messages relatable and enhance engagement.



Community Education Campaigns:

Launch simple, clear campaigns to raise awareness of climate change's local impacts. Focus on practical solutions like water conservation, sustainable farming, and preserving and/or creating green spaces, tailored to the specific needs of each region.



Promote Agricultural Preservation:

Educate and equip communities with sustainable farming practices to preserve agricultural land, enabling continued habitation in rural areas. Provide resources and training to support these efforts.



Empower CSOs and Activists:

Strengthen civil society organisations and environmental activists by providing funding, capacity building, and public platforms to hold the Iraqi government accountable for climate-related issues. Facilitate collaboration between these groups and the government to develop effective climate policies.



Enhance Government Accountability:

Advocate for transparency and regular communication from the Iraqi government on its climate policies. Encourage community involvement in decision-making to ensure government actions align with local needs.



Engage European Governments:

Advocate for European support in climate resilience projects to reduce migration pressures.



Strengthen Climate Communication Strategies:

Focus on clear, targeted communication to inform and engage both Iraqi communities and international partners. Effective communication is key to raising awareness, driving action, and building trust among all stakeholders involved in addressing climate change and related migration.



Promote Agricultural Technology Practices:

Encourage the use of technology in agriculture to boost efficiency, yield, and productivity. Provide training and resources to ensure these innovations are accessible and beneficial across Iraq's agricultural sectors.

1. Introduction

1.1 Context

Iraq is increasingly enduring the most of climate change, which exacerbates existing vulnerabilities in a country already plagued by decades of conflict, political instability, and economic challenges. Rising temperatures, prolonged droughts, and more frequent extreme weather events are severely impacting agricultural productivity, water resources, and livelihoods, particularly in rural areas. This environmental degradation not only threatens food security but also

intensifies social tensions and contributes to internal displacement. As these conditions worsen, the phenomenon of climate-induced migration is becoming more pronounced, driving people to leave their homes in search of survival and stability. This paper examines the intricate link between climate change and migration in and from Iraq, considering both the immediate environmental impacts and the broader socio-economic implications.

1.2 Purpose

The purpose of this policy paper is to provide a comprehensive analysis of the relationship between climate change and external and internal migration in Iraq, with the aim of informing policy decisions at both national and international levels. By synthesising insights from both secondary sources and primary data, including in-depth interviews, this paper highlights the stark realities faced by those affected by climate change in Iraq. It underscores the urgent need for targeted interventions to address the root

causes of migration and to support those forced to leave their homes due to environmental degradation. The findings and recommendations presented are intended to guide policymakers in Iraq and other potential donor countries in formulating responsive and sustainable migration policies that acknowledge the environmental dimensions of migration and that seek to mitigate the human suffering associated with climate-induced displacement.

1.3 Scope and Methodology

This study adopts a qualitative approach to examine the impact of climate change on migration patterns in Iraq, with a particular focus on external migration. IN2

conducted six in-depth interviews with Iraqis, selected to represent diverse perspectives. *See Section 6. Detailed Methodology for approach and limitations.*

Participant Selection:

Note: All participants' names are pseudonyms to protect their identities.

Group 1

Environmental Activists and Local Residents from Southern Iraq and Nineveh

Ali Hussein, 34

A government employee and baker from Maysan governorate, Ali is passionate about environmental activism. His commitment to protecting the local environment stems from a deep connection to his land and a desire to ensure a sustainable future for his community.

Karrar Janubi, 32

Karrar, a fisherman from Maysan, possessing a strong dedication to environmental causes. His activism reflects a deep concern for the challenges facing his community, particularly those linked to industrial activities and climate change.

Hassan Hashemi, 22

Hassan is an enthusiastic young environmental activist from Maysan. His community participation is likely driven by a mix of personal passion and inspiration from seasoned activists, bringing fresh perspectives to environmental challenges.

Sami Ibrahim, 27

From the Buwyer village, Nineveh governorate, Sami comes from a farming and grazing family. Currently unemployed, his background gives him valuable insights into how environmental issues, such as water scarcity, impact rural life.

Group 2

Individuals with International Experience

Kamal, 36

Kamal, from Basra, is a government employee with international experience, having lived in Germany from 2012 to 2018. His time abroad has given him a broader perspective on governance and environmental issues, possibly making him more critical of local practices.

Ahmed, 32

Ahmed, from Rania in Sulaymaniyah governorate, is currently unemployed and living in Germany. He is from a farming family and understands the challenges faced by rural communities. He is contemplating a move to the UK for better opportunities. His experience in Europe adds a unique perspective on migration and environmental issues.

2. Iraq's Changing Climate

Iraq stands as one of the world's most vulnerable countries to the impacts of climate change. This vulnerability stems from a variety of factors, including water scarcity, extreme weather events, desertification, and inadequate water management. The combination of these elements' places immense pressure on Iraq's environment and its people, creating a dire need for comprehensive responses.

Climate change makes regions less habitable and

contributing migration, including rural to urban movements. Additionally, over the period of 50 years, climate and weather-related disasters have increased five-fold in Iraq according to the UN and World Meteorological Organization.¹

Thus, Iraq's multifaceted climate challenges underscore the urgent need for robust and coordinated policy responses to mitigate these impacts and build resilience for the future.

2.1 Environmental Degradation



Water scarcity

10% decrease in average annual rainfall; >40% decrease in water Euphrates and Tigris River flows^{2,3}



Drought and desertification

39% of Iraq's land threatened by desertification⁷



Dust storms

5,000+ people hospitalised in 2022⁵



Extreme heat

1.6°C predicted rise in annual temperatures⁶



Flash floods

900+ households affected in Mar 2024⁴

Across the six IDIs, a common theme is the devastating impact of climate change on traditional livelihoods, particularly agriculture and fishing. Interviewees from across Iraq described how their communities, once sustained by the land and water, have been severely affected by droughts, floods, and environmental degradation. The shift from moderate and consistent rainfall to erratic weather patterns has reduced crop yields and destroyed farmland, forcing many to abandon their traditional ways of life.

“

"Our original homeland in the Huweiza Marsh has now become a barren desert after the marshes dried up."

”

Hassan, 22, from Maysan (Group 1)

“

"The drought has a very big impact, in addition to the pollution from the oil companies."

”

Ali, 34, from Maysan (Group 1)

2. Iraq's Changing Climate

2.2 Agriculture and Livelihoods

Iraq's economy is heavily dependent on agriculture, which has historically provided employment to a significant portion of the population, particularly in rural areas. However, climate change has severely impacted this sector. Increasing water scarcity, caused by a combination of prolonged droughts, rising temperatures and water mismanagement, has critically affected irrigation. Consequently, crop yields decline year on year making farming increasingly untenable.

As of 2024, the agricultural sector, including forestry and fishing, contributes approximately 2.9% to Iraq's GDP and employs around 8.4% of the total workforce.⁸ This is a decline from 2019 where agriculture contributed 3.4% to the national GDP and employed 11% of the workforce.⁹ Unsurprisingly, Iraq's biggest contribution to GDP is the oil and gas sector, accounting for 42% of its GDP in 2021.¹⁰

The impact is evident in the plight of farmers. In Anbar, Kirkuk, Nineveh, and Salah Al-Din, 60% of farmers were forced to cultivate less land or use less water during the most recent farming season. Additionally, 80% of NRC's research's respondents in Nineveh and Kirkuk had to reduce their food expenditure, and 25% of small-scale farmers in Nineveh's Sinjar and Ba'aj had to abandon farming altogether.¹¹

Climate change has drastically affected agriculture in regions traditionally dependent on farming, such as in Rania in Sulaymaniyah governate. The shift from moderate and consistent rainfall to unpredictable droughts and floods has significantly reduced crop yields, undermining the viability of agriculture as a livelihood that generations have previously relied upon.

“Climate change has significantly impacted our region... In recent years, we have experienced long periods of drought and unexpected floods.”

Ahmed, 32, from Sulaymaniyah (Group 2)

In the southern marshes of Iraq, the once-thriving ecosystem that supported hunting, fishing, and buffalo breeding has largely dried up due to drought forcing residents to seek alternative employment, often in oil companies away from their ancestral homes. This shift has not only altered the economic landscape but also caused significant cultural and social disruptions.

“The marshes, the resources we used to live on, such as breeding buffaloes or fish-ing, have disappeared. The drought has taken away our livelihood, forcing us to find other work.”

Karrar, 32, from Maysan (Group 1)

“Before the marshes dried up, I used to work with my father in fishing. However, af-ter the drying up of the Huweiza Marsh, I was forced to work in one of the oil fields near my homeland.”

Hassan, 22, from Maysan (Group 1)



Al-Hamdaniyah farm in Nineveh, 2024. (IN2)

2. Iraq's Changing Climate

2.2.1 Livestock and Food Security

Livestock farming, a crucial component of Iraq's agricultural sector, is also severely impacted by climate change. The scarcity of water and deteriorating pasture conditions have led to a significant decline in livestock numbers. Animals suffer from heat stress and malnutrition, which not only reduces their productivity but also their intrinsic value to livestock owners.

For instance, in Nineveh and other northern provinces, widespread crop failures in 2021 and 2022 exacerbated the decline in livestock, forcing many farmers to sell animals to generate more income. This was caused by the simultaneous increase in the cost of animal feed and the growing reliance on it due to the ongoing drought.¹² The International Organization

for Migration (IOM) highlighted that, in 2023, heat stress and inadequate nutrition significantly diminished milk production and meat quality, further compromising the fragile food security in rural communities.¹³ Furthermore, the loss of livestock also means a loss of income for many families, pushing them further into poverty.

“We graze the livestock ... we drink this [non-potable] water, indeed yes, and God, because we depend on animal husbandry ...”

Samir, 26, from Nineveh (Group 1)

2.2.2 Impact of Climate Change on Crop Production

Staple crops such as wheat, barley, and dates, essential for both domestic consumption and as export products, are particularly vulnerable to the effects of climate change.¹⁴ The reduction in water availability, compounded by increasing soil salinity due to desertification, has led to a marked decline in productivity. In many regions, arable land has turned into barren desert, making farming impossible. This reduction in agricultural output not only affects food security within the country but also diminishes income for farming families.

The decline in water availability has severely impacted irrigation, a critical component of crop cultivation in Iraq. The Tigris and Euphrates rivers, which supply much of the irrigation water, have seen reduced flows due to prolonged droughts and upstream damming. This scarcity has forced farmers

to abandon traditional crops or reduce their cultivated areas significantly.

The economic implications are dire. Farmers who rely on their crops for both sustenance and income are seeing their livelihoods vanish. This has led to increased poverty and food insecurity, forcing many rural inhabitants to migrate to urban areas or even consider leaving the country altogether.

“The drought reduced crop yields, while the floods destroyed farmland [in Rania, Sulaymaniyah], making agriculture more difficult and less productive.”

Ahmed, 32, from Sulaymaniyah (Group 2)



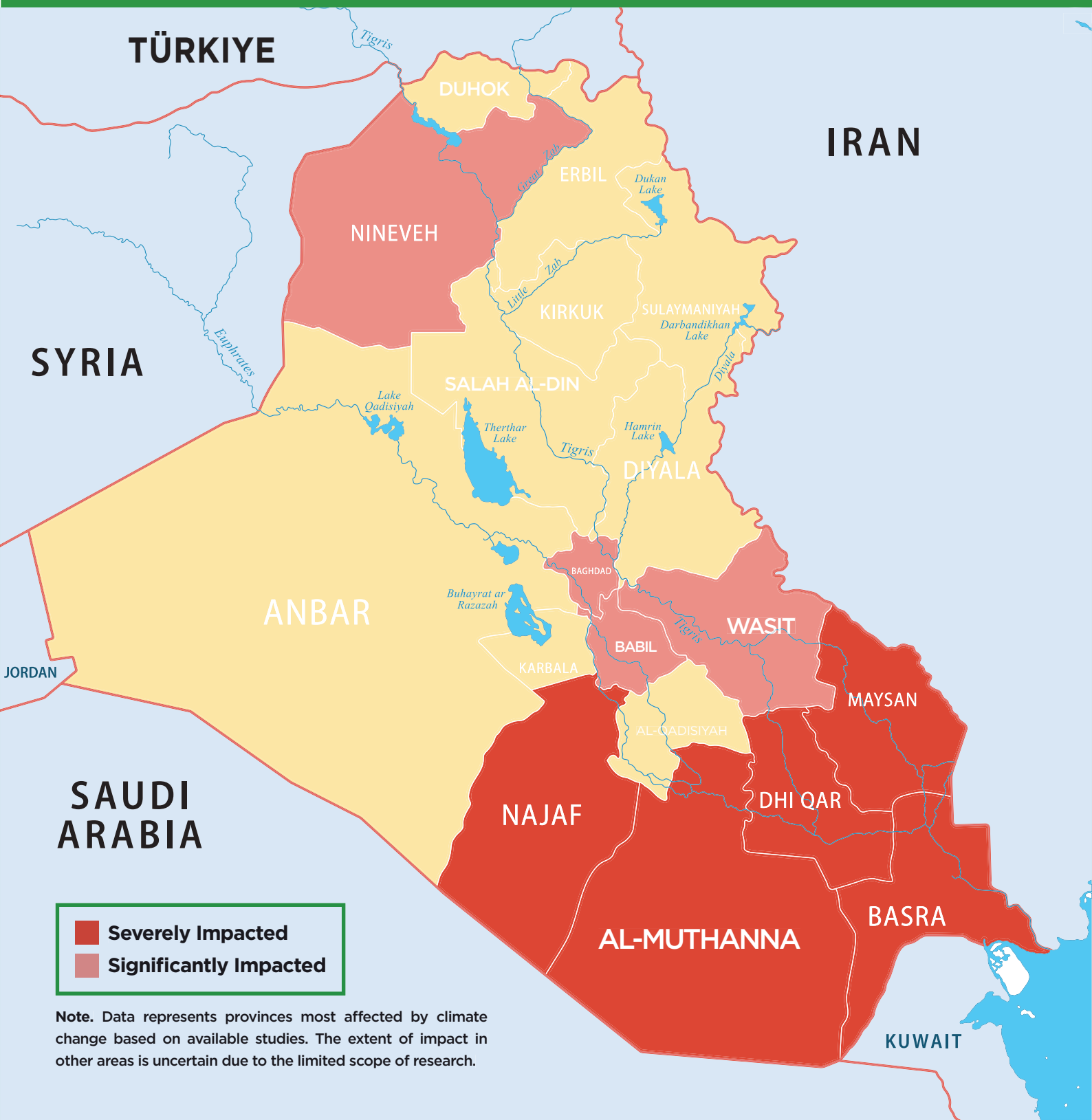
Mosul, Aug 2023 (IN2)

2. Iraq's Changing Climate

2.2.3 Climate-Impacted Regions Across Iraq

The region's most severely impacted by climate change are primarily located in the southern provinces of Iraq, particularly in Basra, Dhi Qar, Maysan, and Najaf. However, the effects of climate change are also significantly felt in other areas, such as Baghdad, Babil and Wasit and Nineveh Governorate, especially within the Nineveh Plains, which are also experiencing substantial environmental challenges¹⁵.

Impact of Climate Change on Affected Regions in Iraq



Note. Data represents provinces most affected by climate change based on available studies. The extent of impact in other areas is uncertain due to the limited scope of research.

3. Climate-Induced Migration in Iraq

Climate change intersects with Iraq's recent history of conflict, political instability and economic hardship, making the country more vulnerable to the impact of climate-induced

environmental degradation. Furthermore, these factors contribute to driving migration – both internal displacement within Iraq and international migration out of Iraq.

3.1 Domestic Rural to Urban Migration

Many rural inhabitants find themselves with no choice but to leave their homes as agricultural conditions in Iraq worsen. The scarcity of water and deteriorating agricultural productivity, as noted above, have rendered traditional farming unsustainable, prompting significant migration to urban centres in search of better opportunities and work. In the four years between 2019 and 2023, more than 62,000 individuals migrated from rural regions to cities due to severe water shortages and the consequent decline in agricultural productivity.¹⁶

Furthermore, as of March 2024, over 23,000 families amounting to 140,184 individuals remain in long term displacement across 12 governorates. The majority of these families originate from areas severely impacted by climate change, including Dhi Qar, Maysan,

Al-Muthanna, and Al-Qadisiyah. Notably, Dhi Qar governorate alone accounts for 44% of the displaced population, with Nasriyah district the hardest hit.¹⁷ Over half have migrated to urban areas, underscoring the growing strain on cities as rural livelihoods collapse under climate stress.

The mass movement to cities has created significant urban challenges. Overcrowding has become a critical issue as cities struggle to accommodate the influx of migrants. This rapid urbanisation has placed immense pressure on housing, leading to a proliferation of informal settlements. In Baghdad alone, there are around 1,000 informal settlements, and in Basra around 700. These settlements are home to approximately 3.3 million people across Iraq without reliable access to water, electricity and other services.¹⁸

3.2 External Migration

In addition to internal displacement, some Iraqis migrate to neighbouring countries, Europe, and other parts of the world. Climate-induced migration is often intertwined with other factors, such as economic hardship, political instability and conflict, making it difficult to distinguish climate refugees from other types of migrants.

According to IOM, people may choose to move either temporarily or permanently, within their country or abroad, due to sudden or gradual environmental changes that adversely affect their lives or living conditions.¹⁹ For example, by late 2016, at least 160 farmers had abandoned their land in the Al-Jisr subdistrict southeast of Baghdad, according to a local agricultural official, with 2,000 families from the wider Besmaya area migrating into urban Baghdad or abroad.²⁰ More recently, the KRI Prime Minister predicted climate change would trigger a new wave of migration to Europe.²¹

A 2024 IOM study suggests that climate change is severely impacting Iraq, particularly in central and southern regions such as Karbala, Maysan, and Dhi Qar. Environmental stresses such as rising temperatures, altered rainfall patterns, and increasing droughts are undermining traditional livelihoods such as agriculture and fishing and are driving significant migration, both internally and internationally. Furthermore, international migration flows are notable from Nineveh, Sulaymaniyah, Wasit and Basra. Emigrants from climate-affected areas often cite humanitarian reasons, including asylum, and are more likely to seek education abroad as economic conditions deteriorate. While neighbouring countries like Türkiye and Iran are common destinations, there is also a strong flow to European countries, particularly from Nineveh to the Netherlands and Germany. These migrants tend to travel alone, relying on personal savings and support networks rather than smugglers, which reduces their risk of exploitation.²²

4. Iraqis' Experiences: Climate and Migration Dynamics

4.1 Migration Drivers and Climate: Gaps and Perceptions

As noted earlier, migration within and from Iraq is multifaceted, driven by a number of, often intersecting, issues and concerns. Conflict, lack of dignity and loss of livelihoods all contribute to migration, often exacerbated by climate change or otherwise underpinned by the impact of climate change drivers.

It is important to recognise there is limited available data on the role of climate change in migration in Iraq, with much of it focused on domestic displacement. There is also limited data on migration routes from Iraq to foreign destinations, including irregular migration to Europe and the UK. Therefore, this section serves to redress some of these gaps and highlight how these two issues are interrelated and

so pose significant risks to the stability and future of Iraq.

Notably, while interviewees are familiar with climate change, the language they used and fears they harboured are focused on the environmental and agricultural consequences. Climate change may be the primary cause behind loss of agricultural land or reduction of crop yields, but these push factors to leaving an area are viewed as drivers contributing to migration rather than the issue of climate change itself. Thus, it is important to demystify how Iraqis talk about the consequences of climate change, as well as to contextualise migration patterns and climate change.

4.2 Health and Environmental Concerns

In Iraq, public health challenges are exacerbated by impacts of climate change, for example increasingly frequent and severe extreme weather events such as heatwaves and dust storms. These events contribute to respiratory illnesses and the spread of waterborne diseases as water quality deteriorates.²³ The strain on Iraq's already fragile healthcare system is compounded by pollution from oil flaring and insufficient access to clean drinking water, leading to heightened risks of cancer and other serious conditions.²⁴ Interviews with residents in southern Iraq highlight how these concerns permeate people's lives:

"The oil expansion is basically cancerous... the drought is the same as a gun to the head... either you leave, you emigrate, or you die ... Before, we lived the luxury of the marshes... now, we buy water from outside... staying in this area is suicide."

Karrar, 32, from Maysan (Group 1)

"Pollution is spreading within us... cancer cases are increasing in a frankly frightening way."

Ali, 34, from Maysan (Group 1)

4.3 Socio-Economic Displacement

Climate change particularly impacts communities dependent on agriculture and fishing, driving socio-economic displacement. The increasing frequency of droughts, desertification, and water scarcity is making traditional livelihoods unsustainable, forcing many to migrate to urban areas or other regions in search of better opportunities. This migration often leads to poverty and social instability as displaced populations encounter inadequate infrastructure, limited job prospects, and cultural tensions in their new environments. Interviews highlighted how rural residents face complications such as challenges in adapting to their new surroundings and hostility or discrimination from the local population.

"Most of the residents of the village where I live have migrated to the outskirts of major cities, where they face difficulties in adaptation and racism ... There is a cultural difference between the rural residents and the city residents, which led to many tribal problems and disputes ... The marshland individual is subjected to many social problems, such as bullying due to their accent and being called derogatory names like 'lower race' by some Iraqis."

Hassan, 22, from Maysan (Group 1)

4. Iraqis' Experiences: Climate and Migration Dynamics

4.4 Impact of Climate Change on Migration Decisions

Across Iraq, the interplay between climate change, environmental degradation, and socio-economic conditions has significantly impacted the lives of many residents, compelling them to consider migration as a means of survival.

The degradation of the environment, particularly the loss of vital water resources, has forced many to contemplate leaving their homeland, despite their deep-rooted emotional attachment to the land. As Karrar plainly states, *"We reject the drought; we demand the return of the marshes... If the government doesn't stop and doesn't return the marshes, we face migration or death."* This statement encapsulates the dire choice facing many: either leave or face the potentially fatal consequences of remaining in an increasingly inhospitable environment.

Ahmed's story further illustrates the direct link between climate change and migration from Iraq. The deteriorating environmental conditions, particularly the impact on agriculture, have made traditional livelihoods unsustainable, forcing people like him to seek a new life elsewhere. *"Climate change was the main reason that drove me to make this decision. The harsh environmental conditions affected our livelihood, making agriculture unviable,"* Ahmed explains. His experience is reflective of a broader trend where environmental degradation pushes communities to migrate as a last resort after losing their means of subsistence.

Kamel also highlights how environmental factors intertwined with economic and social instability to drove his decision to migrate. The extreme heat, pollution from oil emissions, and suffocating humidity in Basra not only took a toll on physical health but

also contributed to significant mental stress. *"The high temperatures in Basra affected my mental health and made me consider migration,"* Kamel remarks, pointing to the cumulative impact of environmental stressors on the decision to leave. Moreover, he notes the broader socio-economic challenges, including limited job opportunities and security concerns, further exacerbated the push factors for migration. *"In general, it was about work and improving the financial situation, which could help with [preventing] migration,"* Kamel adds, illustrating how economic motivations are often intertwined with the environmental pressures in driving migration.

Sami adds, *"Some of my relatives migrated outside the country [to Germany] because of the effects of climate change, such as drought and water scarcity."* This further underscores how climate change directly influences migration decisions. The loss of income due to these environmental challenges has compelled many, including Sami's relatives, to seek livelihoods abroad.

The accounts of Karrar, Ahmed, Kamel and Sami reflect a broader narrative where climate change is a significant, if not the primary, driver of migration decisions in Iraq. The harsh environmental conditions, including extreme heat, drought, and pollution, have made traditional livelihoods unsustainable, leaving many with little choice but to seek better opportunities elsewhere. As these personal testimonies reveal, the choice to migrate is often a reluctant one, driven by a combination of deteriorating living conditions and the hope for a more stable and secure future abroad.

4.5 Migration Decisions and Family Dynamics

The decision to migrate is often complex and deeply intertwined with family dynamics, particularly in regions facing environmental degradation and socio-economic challenges. In many cases, the decision to leave one's homeland is not made in isolation but instead involves difficult conversations and negotiations within the family unit. This dynamic is especially pronounced in Iraq, where generational divides and emotional attachments to the land play significant roles in shaping migration decisions.

Ali highlights the this generational divide often complicates migration decisions within families.

While younger generations may see migration as a necessary response to deteriorating conditions, older generations tend to resist, holding onto a deep emotional attachment to the land. *"You find suffering from the older people... they have love for the land, different from us today,"* Ali explains, illustrating the tension between the desire for a better life and the pull of tradition and heritage. This attachment to the land can override practical considerations, as Ali notes, *"Emotion overrides reason here... the main reason for [us] not migrating so far is this deep attachment to the land."*

4. Iraqis' Experiences: Climate and Migration Dynamics

The role of family in migration decisions is further highlighted in the narratives of Ahmed and Kamel, who both faced significant familial resistance to the idea of leaving Iraq. Ahmed recounts how his father was initially opposed to the idea of migrating, driven by a strong connection to their ancestral land and what remained of their heritage, *"My father was initially against the idea, holding on to the land and what remained of our heritage,"* reflecting the deep emotional and cultural ties that often influence such decisions.

Kamel's experience adds another layer to this understanding because, despite initial reluctance, his mother ultimately supported his decision to migrate and recognised the difficult circumstances he faced in Iraq. *"My mother... knew that my situation had changed, and she understood that the situation wasn't good for a young person. So, she supported me and told me to go ahead,"* Kamel explains. This support from family members, especially from those who might initially resist the idea of migration, is

crucial in facilitating the decision to leave. Kamel's story also underscores the importance of family unity in the decision-making process, as he adds, *"If the opportunity arises, I will consider leaving again, but only with my family."*

The emotional and familial struggles associated with migration decisions are often intensified by environmental factors and lack of economic and social safety nets. Ahmed recalled how a severe flood in 2021 devastated his family's farmland, wiping out an entire season's work and much of their savings. This catastrophic event was a turning point for Ahmed and his family, leading them to seriously consider leaving their ancestral land despite their strong emotional ties. *"In 2021, a severe flood destroyed most of our farmland. We had worked hard all year, but in a single moment, we lost everything,"* Ahmed recounts, highlighting the devastating impact of environmental disasters on family livelihoods and the difficult choices they must face as a result.

4.6 Community Resilience and the Dangers of Migration

In regions facing severe environmental degradation, community resilience has emerged as a critical force in advocating for the rights of local populations. Karrar's account from southern Iraq exemplifies this spirit of resistance, as he and his community remain committed to fighting for the restoration of their lands, particularly the marshes, despite increasing pressure to migrate. For Karrar and his neighbours, this resistance goes beyond mere survival: it is about preserving their cultural and environmental heritage. Karrar asserts, *"As long as we can talk and we have strength, we reject all the changes happening in the area... we demand the return of the marshes."* His call extends to international negotiations, urging global stakeholders to secure a stable water share for Iraq, essential for revitalising Iraqis' agriculture and environment.

Similarly, Ali highlights the pivotal role of young people in leading these efforts, particularly in holding industrial polluters accountable and advocating for environmental restoration. The youth in Ali's community successfully campaigned to secure funding from oil companies for local development projects, demonstrating their commitment to environmental stewardship. As Ali proudly notes, *"We, the youth, are the source of advocacy in our area... we blocked the road to the oil companies and managed to obtain 5 million USD annually for our area."* Their latest initiative, the creation of a green belt, further exemplifies their dedication to safeguarding their environment.

However, while some choose to stay and resist, others are compelled by desperation to embark on perilous migration journeys. The stories of Kamel and Ahmed underscore the extreme risks associated with such decisions. Kamel recalls the harrowing challenges of navigating dangerous overland routes through conflict zones and enduring the long wait for asylum in Türkiye, reflecting the desperation that drives many to seek safety elsewhere. His journey to Germany, fraught with uncertainty, exemplifies the perilous paths many undertake.

Ahmed's experience further highlights the severe risks climate-induced migrants face. His family's journey across the Mediterranean Sea in an overcrowded boat—a route notorious for its dangers—was filled with fear and uncertainty. Despite moments of doubt, Ahmed was driven by the lack of future prospects in his homeland. His story is tragically echoed by the nearly 30 people who lost their lives in Jun 2024 when a yacht capsized off the Italian coast, including Iraqi-Kurdish men, women and children from Erbil and Sulaymaniyah.²⁵

These narratives illustrate the immense challenges and risks faced by those who migrate, driven by the hope for a better future that often seems unattainable in their homeland. For many, embarking on such dangerous journeys is a last resort, reflecting a profound desperation and determination to secure dignity and a chance at a more hopeful life.

5. Conclusion

Climate change is profoundly impacting Iraq, exacerbating existing vulnerabilities and driving significant internal and external migration. The severe deterioration of agricultural productivity, coupled with water scarcity, extreme weather events, and inadequate infrastructure, has rendered traditional livelihoods increasingly unsustainable, forcing many Iraqis to abandon their homes in search of better opportunities.

This research underscores the intricate link between environmental degradation and migration, revealing that climate change is not merely an environmental issue but a socio-economic and humanitarian crisis. Interviews with affected communities highlight the deep-rooted challenges across Iraq, where climate change intersects with political instability, economic hardship, and social tensions. While some communities, particularly in southern Iraq, show resilience and a commitment to preserving their heritage, others are forced to undertake perilous journeys abroad, often at great personal risk.

The findings highlight the urgent need for the Government of Iraq to take immediate and decisive action. The Gol should be held accountable for its

role in addressing climate change and its impact on migration. It is imperative that the Gol develops and implements comprehensive policies that tackle the root causes of migration by mitigating the effects of climate change, improving water management, and supporting sustainable livelihoods.

Furthermore, international collaboration is essential to ensure that migration policies consider the environmental factors driving displacement and provide adequate protection for those forced to migrate. However, the responsibility starts with the Gol, which must prioritise and commit to tangible action.

In conclusion, Iraq's experience serves as a stark reminder of the far-reaching consequences of climate change on human security and social stability. As the impacts of climate change intensify, so too will the pressure on vulnerable communities. It is imperative for the Gol, along with international stakeholders, to act swiftly and decisively to address this growing crisis and prevent further displacement of the Iraqi people. The time for action is now, and the Gol must lead the way.

6. Stakeholder Engagement

To effectively address these challenges, a coordinated effort is required, involving the Gol, European donors, the private sector and CSOs. The Gol should lead by developing transparent and accountable policies that address climate change and its impacts on migration, while ensuring these policies reflect local languages and perspectives. European donors can provide crucial support for climate resilience projects and help fund community educational practices and communication campaigns focused on practical solutions like sustainable farming and water conservation.

The private sector should be engaged to promote the adoption of agricultural technology, boosting productivity and sustainability across Iraq's regions. Additionally, empowering CSOs and environmental activists with the necessary resources and platforms will ensure that local communities are actively involved in decision-making processes. Through this combined and sustained effort, Iraq can better mitigate the impacts of climate change and reduce the pressures driving migration.

7. Detailed Methodology



Interview Structure:

Interviews combined semi-structured and structured questions. This approach allowed for deep exploration of individual experiences while ensuring consistency across interviews for comparative analysis. The interview guides were tailored to each group based on their migration status and climate change experiences.



Data Collection:

Interviews were conducted over the phone, lasting approximately 30 minutes each, in the participants' preferred language (Arabic or Kurdish). This method provided flexibility and encouraged candid responses. Interviews were recorded, with consent, for accurate data analysis.



Data Analysis:

Thematic analysis was employed to identify and report patterns within the data, following these steps:

- Familiarisation with data through repeated reading of transcripts.
- Grouping codes into broader themes.
- Refining themes to ensure accurate reflection of the data.



Limitations:

Despite the small sample size and reliance on phone interviews, which may limit the findings, and the potential biases introduced by self-reported data, the study provides valuable qualitative insights into the relationship between climate change and migration in Iraq. Additionally, a notable limitation of the study is the lack of female participants, as it was not possible to identify individuals from this demographic who were directly affected by this issue. Notably, despite these limitations, the interviews were carefully selected based on IN2's extensive networks and reach.

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